

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 25

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte NOBUSUKE TOUKURA

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Appeal No. 2002-1668  
Application No. 09/531,666<sup>1</sup>

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HEARD: February 13 2003

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Before COHEN, STAAB, and NASE, Administrative Patent Judges.  
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 19 to 36. Claims 1 to 18 stand allowed. No claim has been canceled.

We REVERSE.

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<sup>1</sup> Application filed March 20, 2000, for reissue of U.S. Patent No. 5,730,680 (Application No. 08/726,082, filed October 4, 1996).

### BACKGROUND

The appellant's invention relates to a method and apparatus for controlling a continuously variable transmission for use with an automotive vehicle to change the engine brake force when the vehicle is coasting on a slope having a changing gradient. (column 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

Claims 1, 5, 10 and 14, the independent claims in U.S. Patent No. 5,730,680 read as follows:

1. An apparatus for controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable speed ratio for transmitting a drive from the input shaft to the output shaft, comprising:
  - means for sensing vehicle operating conditions including vehicle acceleration;
  - means for producing a released accelerator pedal indicative signal when the accelerator pedal is released;
  - means for calculating a target value for the speed of rotation of the input shaft based on the sensed vehicle operating conditions;
  - means for calculating a correction factor per predetermined unit time based on the sensed vehicle acceleration when the sensed vehicle acceleration exceeds a threshold value in the presence of the released accelerator pedal indicative signal;
  - means for adding the correction factor to the target input shaft speed value to correct the target input shaft speed value at intervals of the predetermined unit time; and
  - means for controlling the speed ratio to bring the input shaft speed into coincidence with the corrected target value.

5. An apparatus for controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable speed ratio for transmitting a drive from the input shaft to the output shaft, comprising:

- means for sensing vehicle operating conditions including vehicle deceleration;

- means for producing a released accelerator pedal indicative signal when the accelerator pedal is released;

- means for calculating a target value for the speed of rotation of the input shaft based on the sensed vehicle operating conditions;

- means for calculating a correction factor per predetermined unit time based on the sensed vehicle deceleration when the sensed vehicle deceleration exceeds a first threshold value in the presence of the released accelerator pedal indicative signal;

- means for subtracting the correction factor from the target input shaft speed value to decrease the target input shaft speed value at intervals of the predetermined unit time; and

- means for controlling the speed ratio to bring the input shaft speed into coincidence with the decreased target value.

10. A method of controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable speed ratio for transmitting a drive from the input shaft to the output shaft, the method comprising the steps of:

- sensing vehicle operating conditions including vehicle acceleration;

- producing a released accelerator pedal indicative signal when the accelerator pedal is released;

- calculating a target value for the speed of rotation of the input shaft based on the sensed vehicle operating conditions;

- calculating a correction factor based on the sensed vehicle acceleration when the sensed vehicle acceleration exceeds a threshold value in the presence of the released accelerator pedal indicative signal;

- adding the correction factor to the target input shaft speed value to correct the target input shaft speed value;

- controlling the speed ratio to bring the input shaft speed into coincidence with the corrected target value; and

continuously repeating the above sequence of steps at uniform intervals of time to effect changes in the target input shaft speed value in response to changes in the vehicle acceleration.

14. A method of controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable speed ratio for transmitting a drive from the input shaft to the output shaft, the method comprising the steps of:

- sensing vehicle operating conditions including vehicle deceleration;
- producing a released accelerator pedal indicative signal when the accelerator pedal is released;
- calculating a target value for the speed of rotation of the input shaft based on the sensed vehicle operating conditions;
- calculating a correction factor based on the sensed vehicle deceleration when the sensed vehicle acceleration exceeds a first threshold value in the presence of the released accelerator pedal indicative signal;
- subtracting the correction factor to the target input shaft speed value to decrease the target input shaft speed value;
- controlling the speed ratio to bring the input shaft speed into coincidence with the decreased target value; and
- continuously repeating the above sequence of steps at uniform intervals of time to effect changes in the target input shaft speed value in response to changes in the vehicle deceleration.

A review of the file of the original application shows that claims 1 to 18 were allowed in the first Office action from the examiner (Paper No. 6, mailed September 25, 1997). Thus, in the prosecution of the original patent, the claims were never rejected on the basis of prior art (i.e., 35 U.S.C. § 102 or 35 U.S.C. § 103). Paragraph 1 of the Office action of September 25, 1997 reads as follows:

The following is an examiner's statement of reasons for allowance:  
[t]he reasons for allowance of the claims are that the provision of

(1) means for calculating a correction factor per predetermined unit time based on a sensed vehicle acceleration when the sensed vehicle acceleration exceeds a threshold value in a presence of a released accelerator pedal indicative signal, means for adding the correction factor to a target input shaft speed value to correct the target input shaft speed value at intervals of the predetermined unit time, and means for controlling a speed ratio to bring the input shaft speed into coincidence with the corrected target value, (2) means for calculating the correction factor per predetermined unit time based on the sensed vehicle deceleration when the sensed vehicle deceleration exceeds the first threshold value in the presence of the released accelerator pedal indicative signal, means for subtracting the correction factor from the target input shaft speed value to decrease the target input shaft speed value at intervals of the predetermined unit time, and means for controlling the speed ratio to bring the input shaft speed into coincidence with the decreased target value, and (3) the steps of calculating a correction factor based on the sensed vehicle acceleration when the sensed vehicle acceleration exceeds a threshold value in the presence of the released accelerator pedal indicative signal, adding the correction factor to the target input shaft speed value to correct the target input shaft speed value, controlling the speed ratio to bring the input shaft speed into coincidence with the corrected target value, and continuously repeating the above sequence of steps at uniform intervals of time to effect changes in the target input shaft speed value in response to changes in the vehicle acceleration, and (4) the steps of calculating the correction factor based on the sensed vehicle deceleration when the sensed vehicle acceleration exceeds a first threshold value in the presence of the released accelerator pedal indicative signals, subtracting the correction factor to the target input shaft speed value to decrease the target input shaft speed values, controlling the speed ratio to bring the input shaft speed into coincidence with the decreased target values, and continuously repeating the above sequence of steps at uniform intervals of time to effect changes in the target input shaft speed value in response to changes in the vehicle deceleration, in a continuously variable transmission control method and apparatus, are neither taught nor rendered obvious over the prior art references.

In this reissue application, filed less than two years after the original patent issued, the appellant (i.e., the inventor) in his declaration pointed out that he believes the patent to be wholly or partly inoperative or invalid by reasoning of his claiming less

than he had the right to claim in the patent and that one error is the absence of claims of a breadth and scope covering a target input engine speed calculated in accordance with a vehicle speed but not the acceleration of the vehicle.

In the present reissue application, the appellant seeks to obtain the following independent claims:

19. (additions underlined and deletions bracketed vis-a-vis issued claim 1)  
An apparatus for controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable speed ratio for transmitting a drive from the input shaft to the output shaft, comprising:  
means for sensing vehicle operating conditions including vehicle speed [acceleration];  
means for producing a released accelerator pedal indicative signal when the accelerator pedal is released;  
means for determining a vehicle acceleration;  
means for calculating a target value for the speed of rotation of the input shaft based on the determined [sensed] vehicle operating conditions;  
means for calculating a correction factor per predetermined unit time based on the determined [sensed] vehicle acceleration when the determined [sensed] vehicle acceleration exceeds a threshold value in the presence of the released accelerator pedal indicative signal;  
means for adding the correction factor to the target input shaft speed value to correct the target input shaft speed value at intervals of the predetermined unit time; and  
means for controlling the speed ratio to bring the input shaft speed into coincidence with the corrected target value.

23. (additions underlined and deletions bracketed vis-a-vis issued claim 5)  
An apparatus for controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable

speed ratio for transmitting a drive from the input shaft to the output shaft, comprising:

means for sensing vehicle operating conditions including vehicle speed [deceleration];

means for producing a released accelerator pedal indicative signal when the accelerator pedal is released;

means for calculating a target value for the speed of rotation of the input shaft based on the sensed vehicle operating conditions;

means for determining a vehicle deceleration;

means for calculating a correction factor per predetermined unit time based on the determined [sensed] vehicle deceleration when the determined [sensed] vehicle deceleration exceeds a first threshold value in the presence of the released accelerator pedal indicative signal;

means for subtracting the correction factor from the target input shaft speed value to decrease the target input shaft speed value at intervals of the predetermined unit time; and

means for controlling the speed ratio to bring the input shaft speed into coincidence with the decreased target value.

28. (additions underlined and deletions bracketed vis-a-vis issued claim 10)

A method of controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable speed ratio for transmitting a drive from the input shaft to the output shaft, the method comprising the steps of:

sensing vehicle operating conditions including vehicle speed [acceleration];

producing a released accelerator pedal indicative signal when the accelerator pedal is released;

calculating a target value for the speed of rotation of the input shaft based on the sensed vehicle operating conditions;

determining a vehicle acceleration;

calculating a correction factor based on the determined [sensed] vehicle acceleration when the determined [sensed] vehicle acceleration exceeds a threshold value in the presence of the released accelerator pedal indicative signal;

adding the correction factor to the target input shaft speed value to correct the target input shaft speed value;

controlling the speed ratio to bring the input shaft speed into coincidence with the corrected target value; and

continuously repeating the above sequence of steps at uniform intervals of time to effect changes in the target input shaft speed value in response to changes in the vehicle acceleration.

32. (additions underlined and deletions bracketed vis-a-vis issued claim 14)

A method of controlling a continuously variable transmission for use with an automotive vehicle including an accelerator pedal, the transmission having an input and output shaft, the transmission being operable at a variable speed ratio for transmitting a drive from the input shaft to the output shaft, the method comprising the steps of:

sensing vehicle operating conditions including vehicle speed [deceleration];

producing a released accelerator pedal indicative signal when the accelerator pedal is released;

determining a vehicle deceleration;

calculating a target value for the speed of rotation of the input shaft based on the sensed vehicle operating conditions;

calculating a correction factor based on the determined [sensed] vehicle deceleration when the determined [sensed] vehicle acceleration exceeds a first threshold value in the presence of the released accelerator pedal indicative signal;

subtracting the correction factor to the target input shaft speed value to decrease the target input shaft speed value;

controlling the speed ratio to bring the input shaft speed into coincidence with the decreased target value; and

continuously repeating the above sequence of steps at uniform intervals of time to effect changes in the target input shaft speed value in response to changes in the vehicle deceleration.

Thus, this reissue application seeks to enlarge the scope of the issued claims of the patent, and was properly filed within two years from the grant of the patent, as provided by the fourth paragraph of 35 U.S.C. § 251. However, the examiner considers claims 19 to 36 to be unpatentable under 35 U.S.C. § 251 because they improperly



recapture surrendered subject matter (final rejection (Paper No. 11, mailed May 30, 2001), page 2). Specifically, the examiner states:

Applicant's claims exceed the scope of the Examiner's Reasons for Allowance in Paper number 6 of original application 08/726,082.

Specifically, in claim 19, the addition of "means for determining a vehicle acceleration" in line 11, and the replacement of the words "sensed" with "determined" in line 13 broaden the claim. Likewise, in claim 23, the addition of "means for determining a vehicle deceleration" and replacing "sensed" with "determined" broaden this claim. Also, the same changes to claims 28 and 32 render them broader than the original claims.

Since applicant did not comment on the examiner's Reasons for Allowance in the original application, which recited the sensing of vehicle acceleration as the distinguishing patentable feature, applicant is restricted to the limitations therein. See MPEP 1412.02.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the answer (Paper No. 18, mailed February 27, 2002) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 17, filed December 31, 2001) and reply brief (Paper No. 20, filed April 26, 2002) for the appellant's arguments thereagainst.

OPINION

After reviewing the record in light of the arguments presented in the appellant's briefs and in the examiner's final rejection and answer, we conclude that the rejection is not well taken.

35 U.S.C. § 251 provides that a patent may be reissued if it is deemed wholly or partly inoperative or invalid "through error without any deceptive intention." Under the recapture rule, there cannot be said to be an "error" within the meaning of 35 U.S.C. § 251 "[i]f the patentee tries to recapture what he or she previously surrendered in order to obtain allowance of original patent claims." Mentor Corp. v. Coloplast Inc., 998 F.2d 992, 995, 27 USPQ2d 1521, 1524 (Fed. Cir. 1993).

The reissue statute is "based on fundamental principles of equity and fairness, and should be construed liberally." Hester Industries, Inc. v. Stein, Inc., 142 F.3d 1472, 1479, 46 USPQ2d 1641, 1647 (Fed. Cir. 1998), quoting In re Weiler, 790 F.2d 1576, 1579, 229 USPQ 673, 675 (Fed. Cir. 1986). When the Office action determining that claims 1 to 18 contained allowable subject matter was issued on September 25, 1997 in the original application, the rule concerning reasons for allowance, 37 CFR § 1.104(e), provided in its last two sentences (emphasis added):

The applicant or patent owner may file a statement commenting on the reasons for allowance within such time as may be specified by the examiner. Failure to

file such a statement shall not give rise to any implication that the applicant or patent owner agrees with or acquiesces in the reasoning of the examiner.

Subsequently, effective Nov. 7, 2000, 37 CFR § 1.104(e) was amended by deleting its last sentence (underlined above). The accompanying discussion stated that this statement in the rule was inconsistent with recent decisions by the United States Supreme Court and the Court of Appeals for the Federal Circuit<sup>2</sup> which decisions highlight the crucial role the prosecution history plays in determining the validity and scope of a patent (1238 O.G. 77, 103 (Sep. 19, 2000)).

The appellant argues that, in not filing a statement or comments in response to the examiner's reasons for allowance, he was entitled to rely on the above-noted provision of the last sentence of 37 CFR § 1.104(e), i.e., that failure to file such a statement would not give rise to any implication that they agreed with or acquiesced in the examiner's reasoning. We agree. It has been held that an applicant should be entitled to rely on the statutes, Rules of Practice and provisions of the MPEP in the prosecution of his/her patent application. In re Kaghan, 387 F.2d 398, 401, 156 USPQ 130, 132 (CCPA 1967). It is well settled that the rules of the USPTO have the force and effect of law unless they are inconsistent with statutory provisions, In re Rubinfeld, 270

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<sup>2</sup> Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 41 USPQ2d 1865 (1997); Markman v. Westview Instruments, 52 F.3d 967, 34 USPQ2d 1321 (Fed. Cir. 1995), aff'd, 517 U.S. 320, 38 USPQ2d 1461 (1996); Vitronics Corp. v. Conception Inc., 90 F.3d 1576, 39 USPQ2d 1573 (Fed. Cir. 1996); Zenith Labs., Inc. v. Bristol-Myers Squibb Co., 19 F.3d 1418, 30 USPQ2d 1285 (Fed. Cir. 1996).

F.2d 391, 395, 123 USPQ 210, 214 (CCPA 1959), cert. denied, 362 U.S. 903 (1960), and neither any of the cases cited in footnote 2, supra,<sup>3</sup> nor any other decision of which we are aware,<sup>4</sup> has specifically held this provision of 37 CFR § 1.104(e) to be inconsistent with the statute or otherwise invalid. To penalize the appellant for having relied on a provision of the rules which was in effect at the time of their reliance would be contrary to the fundamental principles of equity and fairness on which the reissue statute is based. Hester Industries, supra.

In effect, the examiner seems to be retroactively applying the November 7, 2000 amendment of the rules, supra, by which this provision was removed from 37 CFR § 1.104(e), but an agency does not have the authority to promulgate retroactive rules unless expressly given that authority by Congress, Motion Picture Assn. of America Inc.

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<sup>3</sup> The first three cases cited in footnote 2, supra, do not even deal with an examiner's reasons for allowance. As to the fourth case cited in footnote 2, supra, while it supports the proposition that an examiner's reasons for allowance is part of the prosecution history, it does not, in our view, support the proposition that an examiner's reasons for allowance in a first action allowance of the originally filed claims as in the application before us for review can alone give rise to prosecution history estoppel. From a historical perspective, the Supreme Court stated that "[o]ur prior cases have consistently applied prosecution history estoppel only where claims have been amended for a limited set of reasons, and we see no substantial cause for requiring a more rigid rule invoking an estoppel regardless of the reasons for a change." Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. at 32, 41 USPQ2d at 1872. This statement exemplifies the caution and restraint with which our courts view estoppel.

<sup>4</sup> A lack of response was considered as a factor in the prosecution history limiting the interpretation of the patent claims in Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 979, 52 USPQ2d 1109, 1113-14 (Fed. Cir. 1999).

v. Oman, 969 F.2d 1154, 1156, 23 USPQ2d 1447, 1449 (D.C.Cir. 1992), and the USPTO has not been given such authority.

Moreover, even if present 37 CFR § 1.104(e) had been in effect when the appellant's original application was pending, we do not consider that the recapture rule would preclude him from obtaining the claims now on appeal.

Discussing what may constitute a surrender for purposes of the recapture rule, the Court in Hester Industries, 142 F.3d at 1481, 46 USPQ2d at 1648, stated that:

as a general proposition, in determining whether there is a surrender, the prosecution history of the original patent should be examined for evidence of an admission by the patent applicant regarding patentability. . . . In this regard, claim amendments are relevant because an amendment to overcome a prior art rejection evidences an admission that the claim was not patentable. . . . Arguments made to overcome prior art can equally evidence an admission sufficient to give rise to a finding of surrender. . . . Logically, this is true even when the arguments are made in the absence of any claim amendment. Amendment of a claim is not the only permissible predicate for establishing a surrender.

In the present case, the claims in the appellant's original application were, as noted previously, allowed without having been rejected over prior art. Consequently, the prosecution history of the original application contains none of the evidence relevant to surrender discussed in Hester Industries, supra, in that it contains neither any amendments to the claims, nor any arguments made by the appellants to overcome prior art or for any other purpose pertinent to this appeal. Under the facts of this case,

we know of no decision which holds either that (1) under the recapture rule, a surrender resulted from the appellant's failure to file a statement or comments in response to the examiner's statement of reasons for allowance, or (2) under prosecution history estoppel, a surrender resulted from the appellant's failure to file a statement or comments in response to the examiner's statement of reasons for allowance.

Lastly, we note that the decision reached herein is consistent with the Board of Patent Appeals and Interferences' decision rendered on July 31, 2001 in Ex parte Yamaguchi, 61 USPQ2d 1043 (Bd. Pat. App. & Int. 2001) on reissue Application No. 09/296,102.<sup>5</sup>

### CONCLUSION

We conclude, based on the facts before us in this case, that the appellant surrendered nothing during the prosecution of their original application. Consequently,

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<sup>5</sup> The Board of Patent Appeals and Interferences has now determined that the decision set forth in the opinion in Ex parte Yamaguchi is binding precedent of the Board (see <http://www.uspto.gov/web/offices/dcom/bpai/prec.htm>).

the recapture rule is inapplicable here, and the decision of the examiner to reject claims 19 to 36 under 35 U.S.C. § 251 is reversed.

REVERSED

IRWIN CHARLES COHEN  
Administrative Patent Judge

LAWRENCE J. STAAB  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

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